



ROCHESTER

— *Minnesota* —

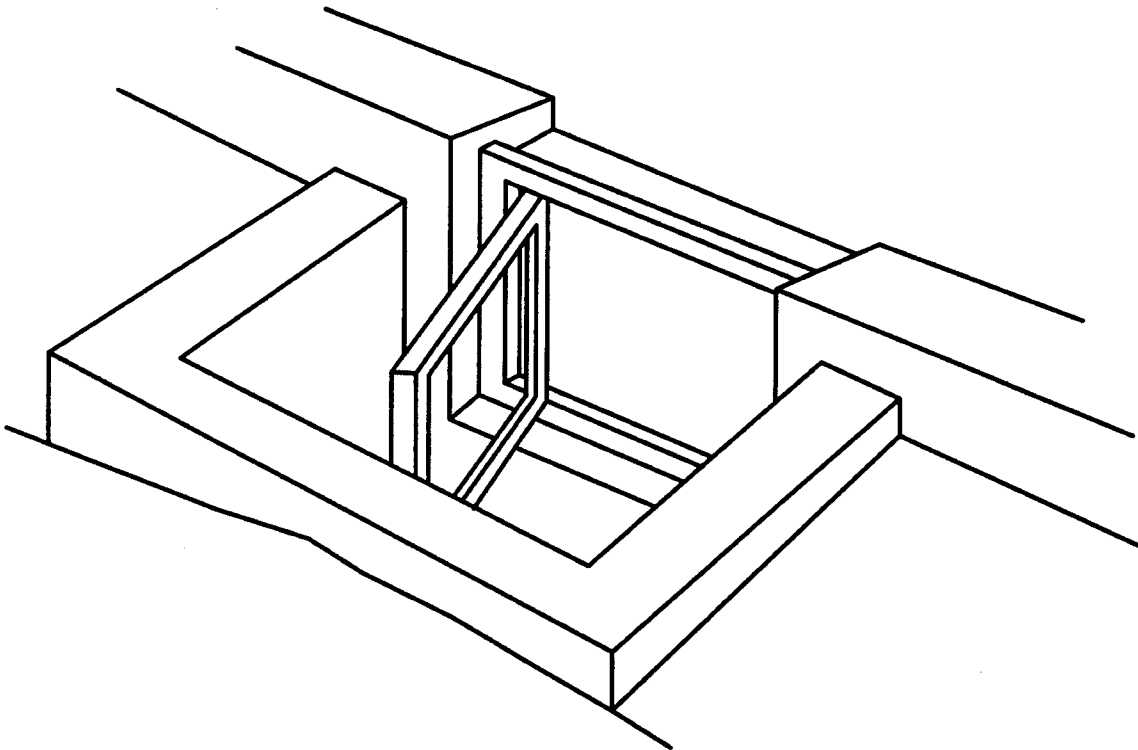
Building Safety Department

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www.rochestermn.gov

Basement Finish

1 & 2 Family Dwellings and Townhomes

Based on the 2007 Minnesota State Building Code



MR = Minnesota State Building Code extracted from 2007 Minnesota Rules

IRC = International Residential Code

NEC = National Electrical Code

HVAC = Heating Ventilation and Air Conditioning

Basement Finish

Permit Requirements:

Building permits are required for a basement finish when any walls are being built, moved or altered and/or a change of use in the proposed area (Including: hanging gypsum board on walls and/or ceiling). Trade permits are required if electrical, HVAC & associated ductwork, fire place, plumbing or gas piping work is being performed. A basement finish shall meet the requirements of the 2007 Minnesota State Building Code which adopts and amends the 2006 International Residential Code.

Permit Fees:

Building permit fees are based on the square footage to be finished and are designed to cover the cost of the plan review and the field inspections that will be performed during construction. An estimate of the permit costs (based on square footage) may be obtained by calling the Building Safety Department.

Plan Review & Inspections:

A plan review is performed by the plans examiner in order to spot potential problems or pitfalls that may arise, prior to construction. Typically the plan review for a basement finish will be performed at the counter during normal work hours, if all needed information is available. Construction inspections will be performed during the project to ensure code compliance and that the materials used are installed correctly. The plan review and inspections are not designed to be a guarantee of the work but they are completed to provide a reasonable degree of review and observation so the project will be successful, safe and long lasting.

Submittals for permit:

The following information is necessary for the Building Safety Department to do a proper plan review and to help the project go as smoothly as possible.

Note: Sample plans provided in this handout are intended as a guide only.

- Completed applications for building, electrical, mechanical, fireplace, plumbing and gas piping permits as applicable to your project.
- Two copies of the basement plan showing the following:
 1. Location & construction of new walls.
 2. Size and location of egress windows. (see window handout)
 3. Location of plumbing fixtures, if applicable.
 4. Location of smoke alarms. (see smoke alarm handout)
 5. Location of fireplace, if applicable.
 6. Electrical plan. (See electrical handout).
 7. Ceiling Height
 8. Label Room uses (i.e. Bedroom, Bathroom, Family Room)

*Note: The Building Safety Department may have a plan in the property file that can be used.

Building Code Requirements:

- Basements and every sleeping room shall have at least one emergency escape and rescue opening with a sill height of not more than 44" above the floor and shall provide not less than 5.7 square feet (clear opening). A minimum ceiling height of 36" shall be maintained above the exterior grade. (see page 4 for details and Emergency Escape and Rescue Opening handout) IRC 310
- Smoke alarms shall be located in each sleeping room, outside of each separate sleeping area in the immediate vicinity of the bedrooms and shall be interconnected in such a manner that the activation of one alarm will activate all of the alarms. Smoke alarms shall also be hardwired and have battery backup. Smoke alarms in existing areas may be solely battery operated when the alterations or repairs do not result in the removal of interior wall or ceiling finishes exposing the structure unless there is a crawl space or basement available which could provide access for hardwiring and interconnection without removal of interior finishes. IRC 313
- Mechanical exhaust is required in bathrooms without operable windows. IRC R303.3
- Pressure treated wood sill plates must be used when in contact with concrete or masonry. IRC R319
- Enclosed accessible space under stairs shall have walls, under stair surface and any soffits protected on the enclosed side with minimum ½" gypsum board. IRC R311.2.2
- Minimum ceiling height is 7'-0". Beams and girders spaced not less than 4'-0" on center may project not more than 6" below the required ceiling height. IRC R305
- If foundation wall insulation is on the interior, a moisture barrier must be located between the insulation and the foundation wall from floor to grade. Minnesota Energy Code 7672.0600 Subp. 2E

Required Inspections:

- **Every effort is made to perform all inspections the next business day following the request. Inspection requests must be received prior to 4:30 pm if the request is for next day service. Call 281-6133 to schedule an inspection. Please have your permit number available when you call. Inspectors work schedules fill up fast at certain times of the year, so if you can call more than a day in advance you may avoid any potential delays in the progress of your project.**
 - **A combination inspection may be conducted for building, HVAC, and plumbing. Please have all of these components ready for a single inspection.**
1. Rough-in inspection: Prior to the framing inspection & gypsum board installation the electrical, mechanical & plumbing rough-in inspections must be scheduled.
 2. Framing inspection: Prior to installation of gypsum board and after the electrical, mechanical & plumbing rough-in inspections.
 3. Insulation inspection: May be performed during framing inspection.
 4. Final inspection: After all work is finished.
 5. Smoke alarms: During the final inspection the inspector will verify that there are smoke alarms in the proper locations in the new area as well as existing areas of the house. See smoke alarms requirements above.

General Notes:

- The plans & inspection card shall be kept on the site of the work until the final inspection has been performed and approved.
- **All contractors must be licensed by the State of Minnesota, or have a Certificate of Exemption from the State of Minnesota.**

INSPECTION GUIDELINES**ELECTRICAL INSPECTIONS:**

- __1. Electrical installations must be in accordance with the current National Electrical Code.

PLUMBING INSPECTIONS:

- __2. Plumbing installations must be in accordance with the 2003 State of Minnesota Plumbing Code.

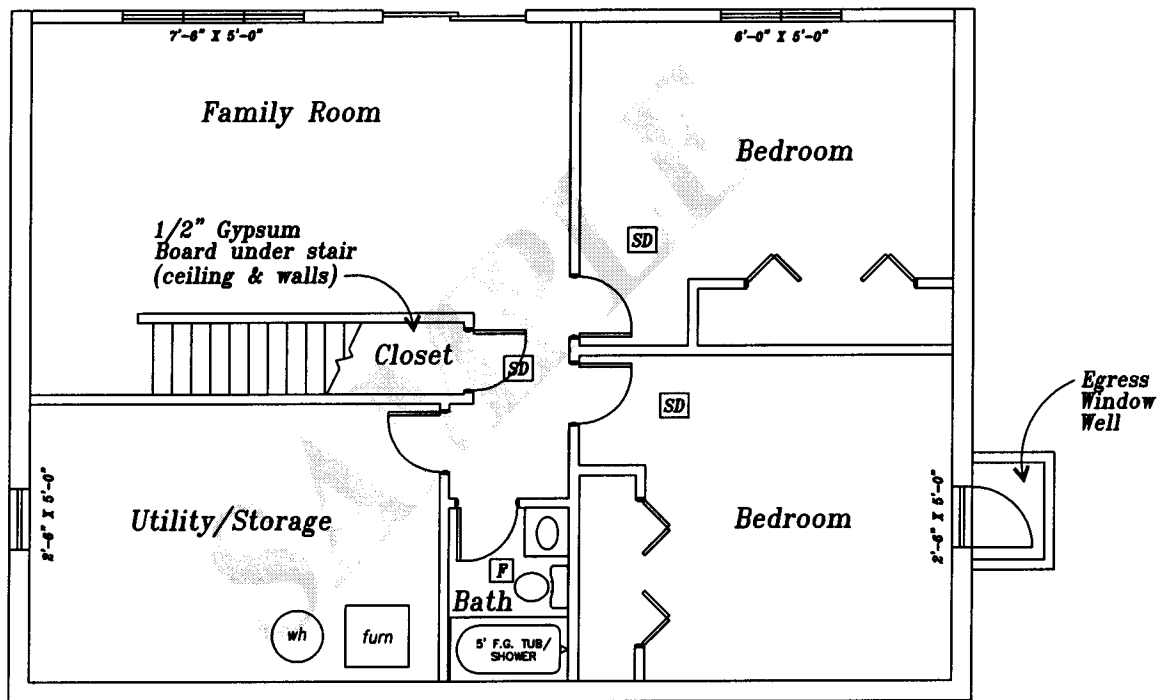
MECHANICAL INSPECTIONS:

- __3. Exhaust fan, with no flexible duct, capable of 5 air changes per hour must be installed in bathrooms without operable windows.
- __4. Heat supplies and cold air returns must be installed in each habitable room.
- __5. Outside combustion air requirements.
- __6. Fireplaces must be installed in accordance to their manufacturers listing.
- __7. Ventilation must be provided in under floor areas.
- __8. New gas line installations must be tested and approved for 25 psi.
- __9. Mechanical installations must be in accordance with the current Mechanical Code.

BUILDING INSPECTIONS:

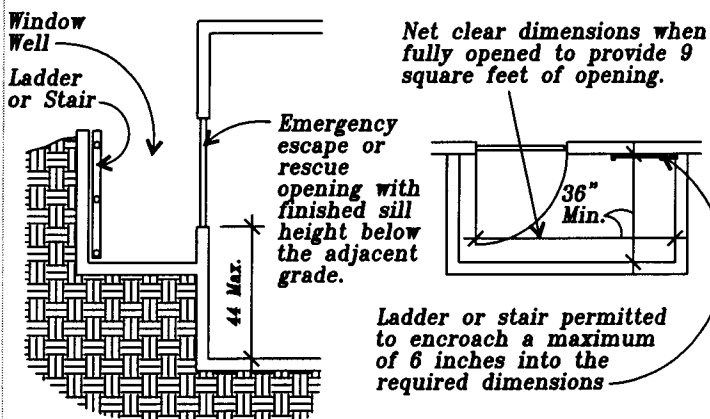
- __10. Exits from each bedroom: See emergency escape and rescue opening handout for requirements.
- __11. Light and ventilation: See other handouts for habitable rooms.
- __12. Smoke alarms: See other handouts for installation requirements.
- __13. Enclosed usable space under stairs must be protected with min. 1/2" gypsum wallboard.
- __14. Foam plastic insulation must be covered by a minimum 1/2" gypsum wallboard.
- __15. Install moisture barrier on the warm side of an exterior wall.
- __16. Install a poly vapor barrier on the inside of the studs before gypsum board.
- __17. Cutting/notching of joists, beams and load bearing studs: See other handouts.
- __18. Ceiling headroom a minimum of 7'-0" in habitable rooms*.
- __19. Building installations must be in accordance with the 2007 Minnesota Building Code which adopts and amends the 2006 International Residential Code.

*Habitable space: A space in a building for living, sleeping, eating or cooking. Bathrooms, toilet rooms, closets, halls, storage or utility spaces and similar areas are not considered habitable spaces.



PLAN

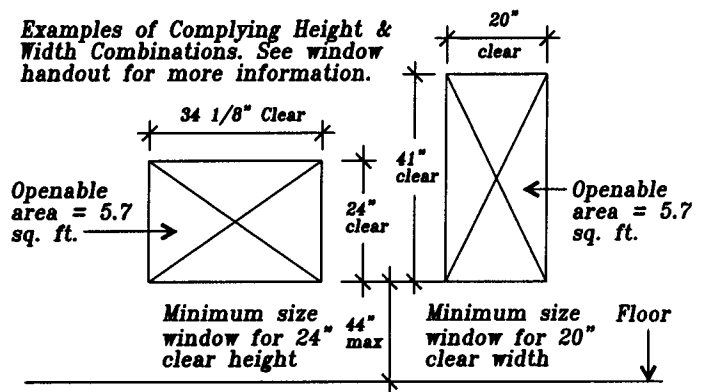
Emergency Escape and rescue window wells must provide a minimum area of 9 square feet with a minimum dimension of 36" and shall enable the window to open fully. If the depth of the window well exceeds 44 inches, a permanently affixed ladder must be provided. The ladder must not interfere with the operation of the window.



Emergency Escape and rescue windows must meet the following criteria:

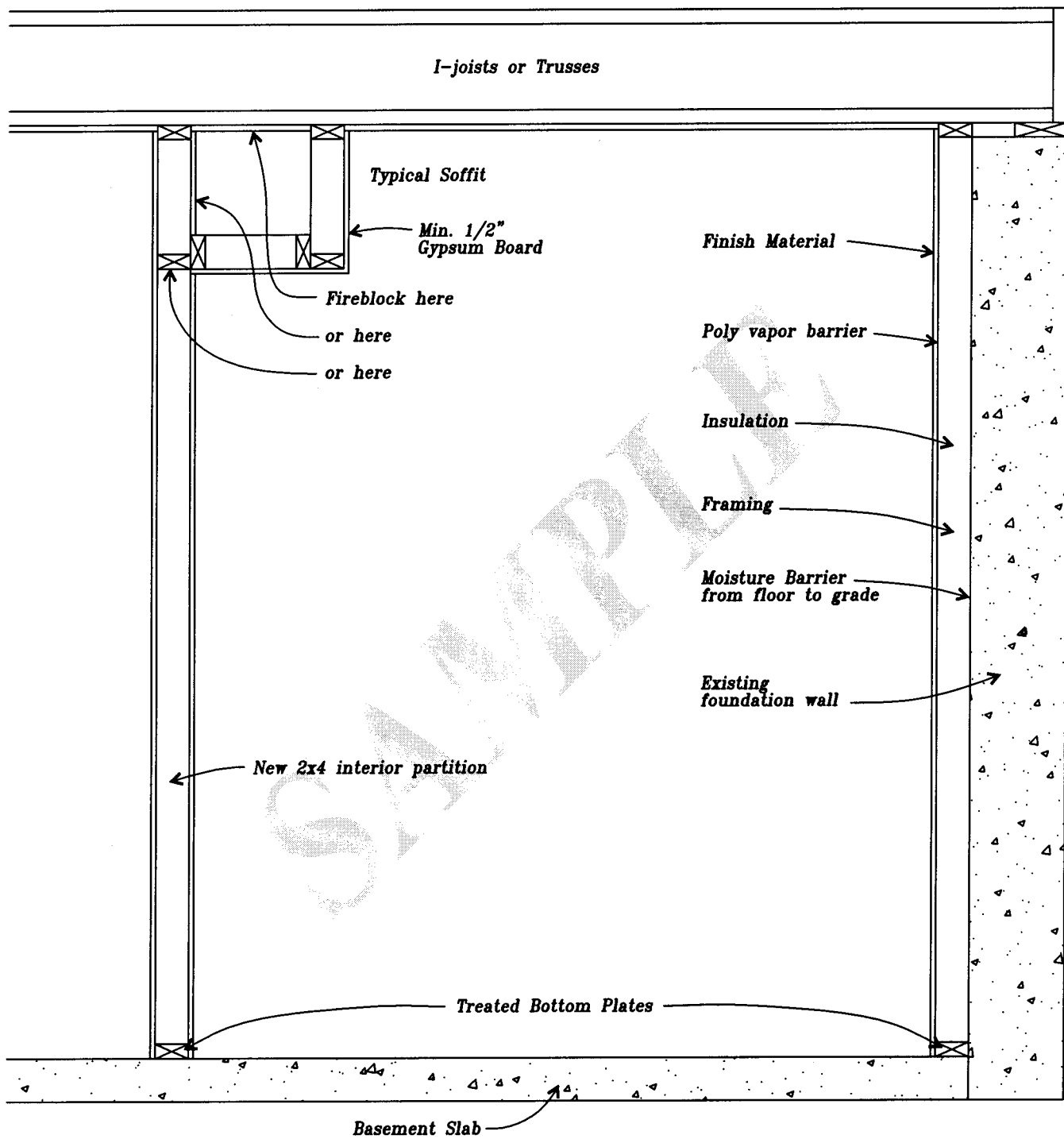
- A minimum total openable area of not less than 5.7 s.f.
- A minimum clear opening height of not less than 24"
- A minimum clear opening width of not less than 20"
- A finished sill height of not more than 44" above the floor and should be openable from the inside with normal operation and without use of tools, keys or effort.

Examples of Complying Height & Width Combinations. See window handout for more information.



**Emergency Escape &
Rescue Window Well**
IRC R310

**Emergency Escape
& Rescue Window**
IRC R310



Basement Finish Details